AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-27. (canceled)

28. (new) A method for testing and selecting an agent to determine whether said agent inhibits or stimulates clonal growth, comprising the steps:

a) testing said agent with an in vitro clonal test to study the effect of said agent on cloning;

b) testing the effect that different degrees of local collocation of cells has on the effect of said agent on cloning;

c) testing said agent with an in vivo metastasizing test that determines the effect of said agent on metastasizing cells;

d) testing said agent with an in vivo test of clonal growth of immune cells stimulated by immunization of the subject;

e) evaluating the results obtained with steps a), b), c) and d); and

f) determining and selecting said agent.

29. (new) The method according to claim 28, wherein said cloning test comprises:

i) seeding of cells in a suitable medium with or without growth factor,

ii) incubating said cells in suitable temperature and atmosphere with said agent; and

iii) determining the effect of said agent on cloning of said cells.

30. (new) The method according to claim 29, wherein the clonal test is performed in:

i) a fluid medium; or

ii) a semisolid or solid medium

31. (new) The method according to claim 29, wherein the cells are malignant cells, normal cells, cell lines, transformed cells and cells from a tumor or malignant disease of a patient.

32. (new) The method according to claim 29, wherein the cells are immune cells that are cloned and selected after immunization.

33. (new) The method according to claim 29, wherein the cells are selected from the group consisting of BHK21/c13, and BHK21/C13 cells transformed with polyoma virus.

34. (new) The method according to claim 29, wherein the medium further comprises insulin, serum, insulin like growth factors, cytokines, or serum extenders, and conditioned medium or a combination of these.

35. (new) The method according to claim 28, wherein step b) comprises:

i) transplanting a tumor cell to an animal, or seeding experimental cell cultures with any of the mentioned cells;

ii) treating the animal with said tumor cell or the cells in experimental cell cultures with said agent;

iii) determining the effect of said agent on cloning of said tumor cell in the animal or of the cells in experimental cell cultures.

36. (new) The method according to claim 28, wherein step c) comprises:

i) injecting tumor cells in an animal to develop metastases, ascites or local tumors;

ii) applying the agent; and

iii) determining the effect of said agent to affect the liberation of cells, migration, and the ability to form a local tumor.

37. (new) The method according to claim 36, wherein said tumor cells are transplanted Ehrlich carcinoma cells.

38. (new) The method according to claim 28, wherein said method detects an agent that causes an increased number of clones and/or facilitates the growth and migration of metastases and/or growth of primary tumors.

39. (new) The method according to claim 28, wherein the agent is selected from the group consisting of drugs, food, food additives, toxins microbes, and a component of a physiological or a pathological process.

40. (new) The method according to claim 28, wherein the agent is selected from the group consisting of drugs, food, food additives, toxins, potential toxins, microbes, a component of a physiological or a pathological process.

41. (new) The method according to claim 28, wherein the agent is a drug.

42. (new) The method according to claim 28, wherein the agent is a food.

43. (new) The method according to claim 28, wherein the agent is a food additive.

44. (new) The method according to claim 28, wherein the agent is a toxin.

45. (new) The method according to claim 28, wherein the agent is a mircobe.

46. (new) The method according to claim 28, wherein the agent is a component of a physiological or a pathological process.

47. (new) A method for inhibiting clonal cell growth, comprising, administering to cells an effective amount of a clonal mitotic inhibitor determined by the method according to claim 28.

48. (new) The method according to claim 47, wherein the clonal mitotic inhibitors are selected from the group consisting of 4-OH-OPB, Kolchicin, Ibuprofen, Naproxen, Acetyl salicylic acid, p-hydroxy-azobenzene, 2-Butyl-2-hydroxy-N-(4-hydroxy-phenyl)-N'-phenyl malonamide, 1,2-diphenyl-4-hydroxy-4-[2-(phenylsulfinyl)ethyl]-3,5-pyrazolidinedione, and analogues thereof.

49. (new) The method according to claim 48, wherein the cells are tumor cells.

50. (new) A method for inhibiting clonal cell growth in a subject, comprising: administering to subject an effective amount of a clonal mitotic inhibitor determined by the method according to claim 28.

51. (new) The method according to claim 50, wherein the clonal mitotic inhibitors are selected from the group consisting of 4-OH-OPB, Kolchicin, Ibuprofen, Naproxen, Acetyl salicylic acid, p-hydroxy-azobenzene, 2-Butyl-2-hydroxy-N-(4-hydroxy-phenyl)-N'-phenyl malonamide, 1,2-diphenyl-4-hydroxy-4-[2-(phenylsulfinyl)ethyl]-3,5-pyrazolidinedione, and analogues thereof.

52. (new) The method according to claim 51, wherein the patient has or is at risk of developing a disorder selected from the group consisting of arteriosclerosis, an autoimmune disorder, a rejection of a transplant, and a disorder related to cell growth initiated by radioactivity, and viral growth in cells of the organism.

53. (new) The method according to claim 52, wherein said viral growth is due to HIV or Herpes infection.

54. (new) The method according to claim 53, wherein 4-OH-OPB is administered to a subject after said subject has been exposed or infected to HIV and before HIV infected cells are piling up.

55. (new) The method according to claim 53, wherein 4-OH-OPB is administered to a subject with chronic infections or AIDS after removing the collocated infected cells.

56. (new) The method according to claim 53, wherein 4-OH-OPB is administered in combination with an anti-viral treatment to inhibit drug resistance.

57. (new) The method according to claim 52, wherein 4-OH-OPB is administered as an initial treatment to a subject in order to inhibit metastasis of a cancer.

58. (new) The method according to claim 52, wherein 4-OH-OPB is administered to a subject undergoing conventional cancer treatment.

59. (new) A method for stimulating clonal cell growth, comprising: administering to cells an effective amount of a clonal mitotic stimulator determined by the method according to claim 28.

60. (new) The method according to claim 59, wherein the clonal mitotic stimulators comprise insulin, insulin like growth factors, conditioned medium, serum factors, serum extenders, Diclofenak, Sulindak or Benzo(a)pyrene and analogues thereof.

61. (new) A method for testing an agent to determine whether said agent inhibits or stimulates clonal growth, comprising the steps:

a) testing said agent with an in vitro clonal test for studying the effect of said agent on cloning, said cloning test comprising:

i) seeding of cells in a medium with or without growth factor,

ii) incubating said cells in a suitable temperature and atmosphere with said agent; and

iii) determining the effect of said agent on cloning of said cells;

b) testing the effect that different degrees of local collocation of cells have on the effect of said agent on cloning, said testing comprising:

i) transplanting a tumor cell to an animal, or seeding experimental cell cultures with BHK21/c13 or BHK21/C13 cells transformed with polyoma virus;

ii) treating said tumor cell in the animal or the cells in experimental cell cultures with said agent;

iii) determining the effect of said agent on cloning of said tumor cell or stimulated immune cells in the individual or the cells in experimental cell cultures;

c) testing said agent with an in vivo metastasizing test to determine the effect of said agent on metastasizing cells, said step comprising:

i) injecting tumor cells in an animal to develop metastases, ascites or local tumors;

ii) applying the agent; and

iii) determining the effect of said agent to affect the liberation of cells, migration, and the ability to form local tumor;

d) evaluating the results obtained with steps a), b), and c); and

e) determining whether said agent inhibits or stimulates clonal growth.